

DRAFT

Addendum to **Detail Background to the Curriculum Vitae of John Oldham** **Submitted to the Commonwealth Forestry Association, 1998**

I am indebted to fellow members of the industry in many countries for providing me with information and an inspection of their operations for my decisions to use the following unusual features which have proved to be invaluable.

1. A 72 inch diameter ring debarker with maximum space for bark clearance every where.
2. A 72 inch diameter extra heavy disc chipper, which would accept a 57 inch wide slab, a round log 43 inches diameter at the butt and is fitted with a 3000 horse power, 200 revolutions per minute, direct on line start, synchronous motor with 275% pull-out torque.
3. Maximum log weight 12 tonnes. Could be loaded onto truck with jinker, one end at a time, by a Cat 966. Uses Cat 988 forked loaders for push-unloading and log handling in yard and to mill infeeds.
4. Logs which have a buttdiameter too big for the debarker have oversize portion cut off in the log yard by manual chain saw. The oversize piece is then split by a large easily-demountable wedge fitted to the forks of a Cat 988.
5. Logs with a buttdiameter which would not fit into the chipper are cut for maximum saw deck length of 15 feet by hand chain saw in log yard. Data indicated enough logs for sawing to keep the saw going 1.5 shifts.
6. Normal mining inclined vibrating screens
7. Rubber belt handling of chips including ship loading. Tests indicated that dead weight capacity of vessels would most likely be achieved.
8. Open rear discharge of chipper to reduce fines production. Tests indicated that callophyla chips were well formed with tendency to split.
9. Rail transport of chips to a port approximately 140 kilometres north of the resource centre. The mill adjoins an existing railway line, which was little used by other traffic, just north of the start of steep grades adverse to the loaded train. A community reaction was expected against road transport of logs or chips as the main road passed through the centre of most towns, was winding with limited passing points and the heavy truck numbers would more than double.

10. Mechanical ring debarker with air-operated, log-centring “flippers” on the in-feed. The operators learnt to handle these with great dexterity as they were mostly needed for small logs.
11. Very heavy log troughs and decks and extra heavy disk to reduce maintenance as the logs had a green density 1060 kilograms per cubic metre.
12. Generous bark discharge openings in troughs and decks and mechanical collection of bark.
13. Slewing and luffing vessel loading boom and vessel warping to position holds.
14. Ship loader approach conveyor at an angle to the vessel berth face. Service jetty for shiploader and vessels, heavily reinforced to accommodate erection and maintenance cranes, at right angles to the berth face.
15. 1200 tonnes per hour of chips capacity ship loader, normally run continuously, except for 40 minutes when holds change, at 1000 tonnes per hour so that a 42000 tonne dead-weight vessel arriving at the berth at 8.00am can depart from the port two days later at 8.00 am. The system has the same approximate volume capacity as an iron ore system carrying 6000 tonnes per hour
16. Railway chip wagons are made from rust resistant steel, each carries 47 tonnes [narrow gauge] and have bomb bay [clam shell] discharge doors, each being half the length of the wagon. The discharge operator used an air wrench to turn a screw on the wagons to open the doors. The train is run as a unit. Each wagon takes one minute to load from an overhead bin at the mill and discharges in one minute if the conveyor feeding hopper underneath is empty.

General comments relative to the future of chip milling and plantations-

- Asia
The lack of transport facilities such as good all-weather roads and sturdy boats in areas more remote from the main towns reduces the exchange of information between the central authorities and rural communities. This, combined with a lower level of education and limited funding in the rural areas leads to planning, implementation, revenue collection and progress reporting difficulties. All these deficiencies will improve with time and so will forest management. There is abundant latent talent and ambition.
- Korea, Japan and Taiwan
High population densities
- USA and Canada
Well endowed with forest resources which are well managed. Will owners of plantations or native forests in Australia allow camping for a fee just as fish farms charge fees for fishing permits or Westvaco Paper allows hunting for a fee on its forest land ?

I am optimistic about the future of forests. Some of the observations upon which my optimism is based are-

1. Georgia, USA

Vast areas of cotton growing land made useless by the boll worm at the turn of the century, now covered with natural mixed species forests. Traces of the old contour banks can still be seen.

2. West Virginia, USA

Large areas of regrowth hardwoods ready for logging 70 years after the ground was cleared for wood for steel making. The Bessemer iron making furnace made wood use uneconomic early this century.

3. Scotland

The reforestation of hills below the snow line with hard and softwoods. The original wood went for iron making hundreds of years ago.

4. New Zealand

The application of trace elements to obtain flourishing pine plantations on volcanic ash.

5. China

Plantations on hills that were regarded as being naturally bare

6. Sweden

Planted farm wood lots which are now controlled as part of the natural environment

7. France

Natural farm wood lots, retained by ordinance for environmental purposes and often used for private hunting in the season, which help France to be one Europe's largest producers of wood.

8. Western Australia

Hardwood plantations competing with sheep, wheat and cattle as a preferred source of income by farmers.

9. East Sabah, Malaysia and Madding, Papua New Guinea

Excellent tropical plantations. The rapid regrowth of native forests after controlled logging.

10. Brazil, Argentina, Portugal and Spain

Widespread plantations providing raw materials for paper and, in some cases, energy. I have little doubt that in the future they will also be sawn in large quantities.

11. Europe

All the managed natural forests.